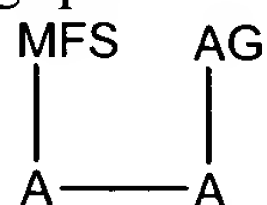


## Amendments to the Claims

1. (Previously amended) A composition comprising a metallic surface, said surface comprising:
  - a) a self-assembled monolayer (SAM) forming species comprising a capture probe, wherein said capture probe comprises a nucleic acid; and,
  - b) an asymmetric monolayer forming species having the formula:



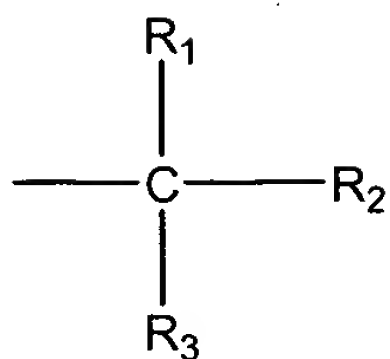
wherein

A is an attachment linker moiety selected from the group consisting of sulfur and phosphonate;

MFS is a monolayer forming species selected from the group consisting of conductive oligomers and insulators;

AG is an electroconduit forming species and,  
wherein MFS and AG are different.

2. (Original) A composition according to claim 1 wherein A is sulfur.
3. (Original) A composition according to claim 1 wherein said metallic surface is gold.
4. (Original) A composition according to claim 1 wherein said MFS is an insulator.
5. (Previously amended) A composition according to claim 4 wherein said insulator comprises an alkyl group from 7 to 20 carbons.
6. (Original) A composition according to claim 5 wherein said alkyl group comprises a heteroalkyl.
7. (Original) A composition according to claim 5 wherein said alkyl group comprises a substituted alkyl.
8. (Original) A composition according to claim 1 wherein said AG comprises an alkyl group from about 1 to 6 carbons.
9. (Previously amended) A composition according to claim 1 or 8 wherein said AG is branched, having the formula:



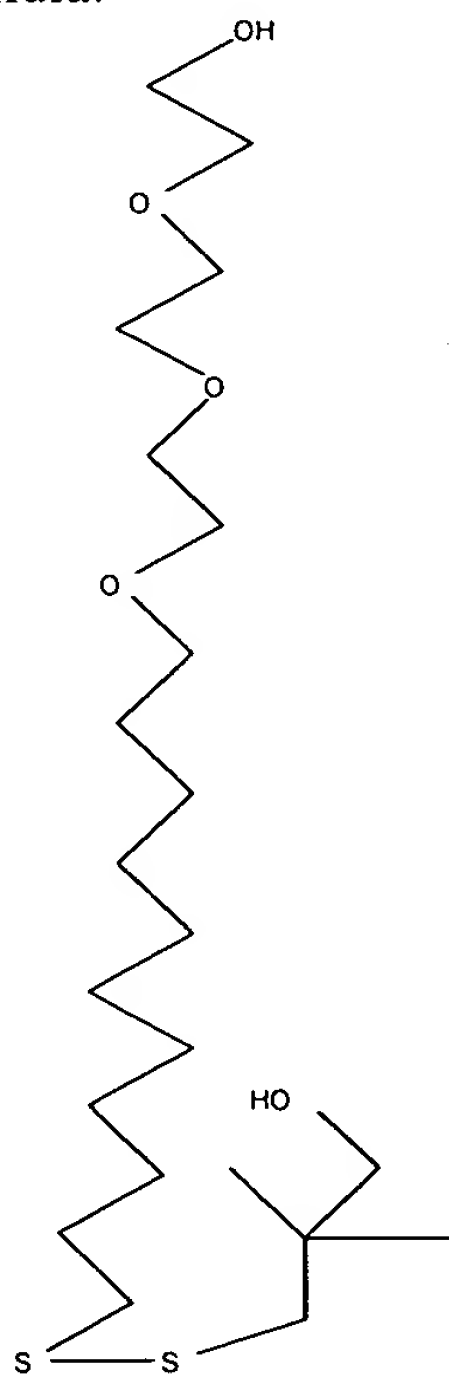
wherein

$R_1$  through  $R_3$  are each, independently from the others, selected from the group consisting of hydrogen, alkyl, aryl, alcohol, amine, amido, nitro, ether, ester, ketone, imino, aldehyde, alkoxy, carbonyl, halogen, sulfur containing moiety and phosphorus containing moiety.

10. (Original) A composition according to claim 9 wherein said AG is attached to said attachment linker via a  $(CH_2)_n$  group, wherein  $n$  is an integer from 0 to 4.

11. (Original) A composition according to claim 9 wherein said AG is attached directly to said attachment linker.

45. (Previously presented) A composition according to claim 1, said asymmetric monolayer forming species having the formula:



46. (Previously presented) A composition according to claim 1, wherein said SAM forming species is an insulator.

47. (Previously presented) A composition according to claim 45, wherein said insulator comprises an alkyl group from 7 to 20 carbons.